

## Product datasheet

### Anti-BNIP3 antibody [EPR4034] $\alpha$ b109362

KO **VALIDATED** Recombinant RabMAb

★★★★☆ [3 Abreviews](#) [62 References](#) [9 Images](#)

#### Overview

<b>Product name</b>	Anti-BNIP3 antibody [EPR4034]
<b>Description</b>	Rabbit monoclonal [EPR4034] to BNIP3
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IHC-P, ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	WB: Jurkat cells, Jurkat cells treated with etoposide, SH-SY5Y cells, SH-SY5Y cells treated with camptothecin and MCF-7 cells treated with Cocl2 lysates and rat kidney, mouse spleen and mouse kidney tissue lysates. IHC-P: Human renal adenocarcinoma and kidney tissues. ICC/IF: HeLa and SH-SY5Y cells.
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Stable for 12 months at -20°C.
<b>Storage buffer</b>	<p>pH: 7.20</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: 40% Glycerol, 59% PBS, 0.05% BSA</p>
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR4034

Isotype

IgG

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab109362 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★★ (3)	1/1000. Detects a band of approximately 30 kDa (predicted molecular weight: 22 kDa). <b>For unpurified use at 1/1000 - 1/10000.</b>
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See <b>IHC antigen retrieval protocols</b> . (Heat to 98°C, allow to cool for 10-20 minutes). <b>For unpurified use at 1/50 - 1/100.</b> <b>ab172730</b> - Rabbit monoclonal IgG, is suitable for use as an
ICC/IF		1/150. <b>For unpurified use at 1/100 - 1/250.</b>

## Target

### Function

Apoptosis-inducing protein that, which can overcome BCL2 suppression. May play a role in repartitioning calcium between the two major intracellular calcium stores in association with BCL2.

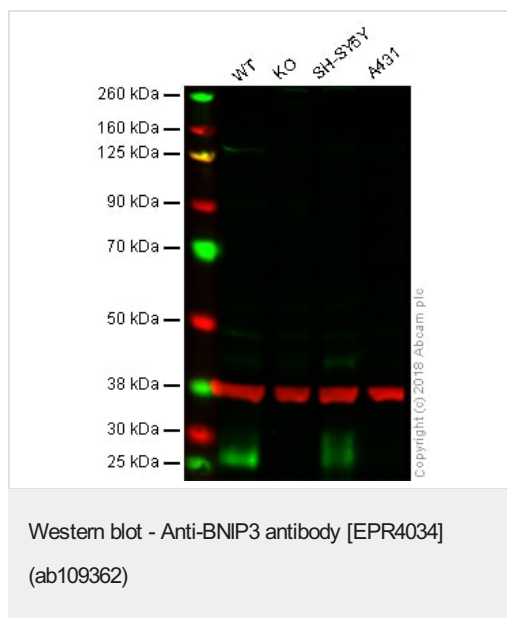
### Sequence similarities

Belongs to the NIP3 family.

### Cellular localization

Mitochondrion. Mitochondrion membrane. Coexpression with the EIB 19-kDa protein results in a shift in NIP3 localization pattern to the nuclear envelope. Colocalizes with ACAA2 in the mitochondria.

## Images



**Lane 1:** Wild-type HAP1 whole cell lysate (40 µg)

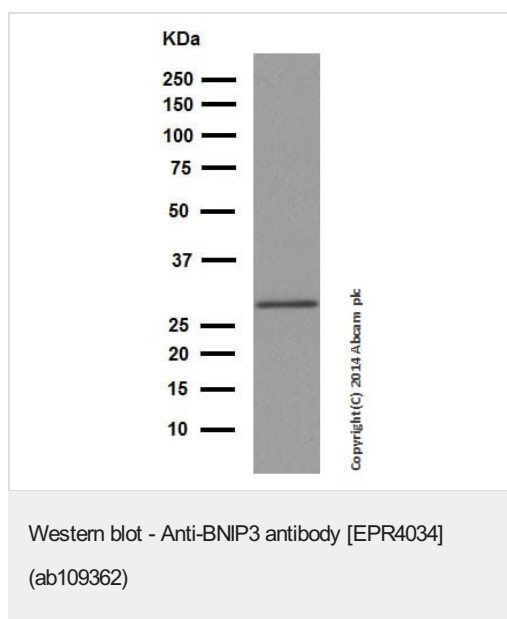
**Lane 2:** BNIP3 knockout HAP1 whole cell lysate (40 µg)

**Lane 3:** SHSY5Y whole cell lysate (40 µg)

**Lane 4:** A431 whole cell lysate (40 µg)

**Lanes 1 - 4:** Merged signal (red and green). Green - ab109362 observed at 25 kDa. Red - loading control, **ab9484**, observed at 37 kDa.

ab109362 was shown to recognize BNIP3 in wild-type HAP1 cells as signal was lost at the expected MW in BNIP3 knockout cells. Additional cross-reactive bands were observed in the wild-type and knockout cells. Wild-type and BNIP3 knockout samples were subjected to SDS-PAGE. ab109362 and **ab9484** (Mouse anti-GAPDH loading control) were incubated overnight at 4°C at 1/1000 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed **ab216773** and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed **ab216776** secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.



Anti-BNIP3 antibody [EPR4034] (ab109362) at 1/1000 dilution (purified) + SH-SY5Y cell lysate at 20 µg

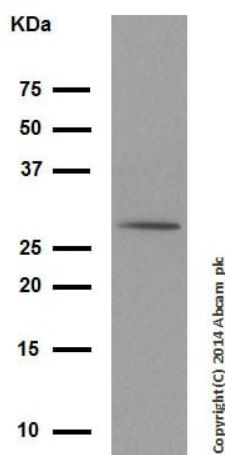
### Secondary

Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

**Predicted band size:** 22 kDa

**Observed band size:** 30 kDa

Blocking and diluting buffer: 5% NFDM/TBST.



Western blot - Anti-BNIP3 antibody [EPR4034]  
(ab109362)

Anti-BNIP3 antibody [EPR4034] (ab109362) at 1/2000 dilution  
(purified) + Jurkat cell lysate at 10 µg

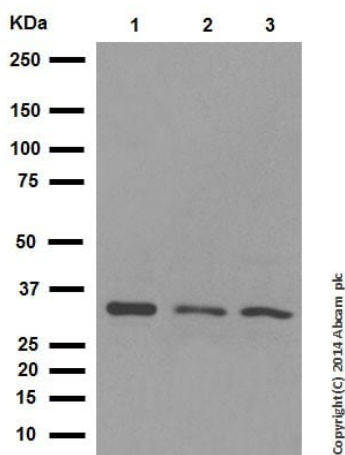
#### Secondary

Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000  
dilution

**Predicted band size:** 22 kDa

**Observed band size:** 30 kDa

Blocking and diluting buffer: 5% NFDM/TBST.



Western blot - Anti-BNIP3 antibody [EPR4034]  
(ab109362)

**All lanes :** Anti-BNIP3 antibody [EPR4034] (ab109362) at 1/2000  
dilution (purified)

**Lane 1 :** Rat kidney tissue lysate

**Lane 2 :** Mouse kidney tissue lysate

**Lane 3 :** Mouse spleen tissue lysate

Lysates/proteins at 20 µg per lane.

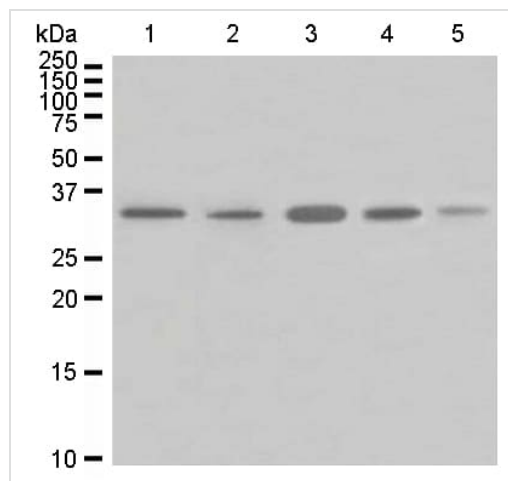
#### Secondary

**All lanes :** Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at  
1/1000 dilution

**Predicted band size:** 22 kDa

**Observed band size:** 30 kDa

Blocking and diluting buffer: 5% NFDM/TBST.



Western blot - Anti-BNIP3 antibody [EPR4034]  
(ab109362)

**All lanes :** Anti-BNIP3 antibody [EPR4034] (ab109362) at 1/1000 dilution (unpurified)

**Lane 1 :** Jurkat cell lysate treated with etoposide

**Lane 2 :** Jurkat cell lysate

**Lane 3 :** SH-SY5Y cell lysate treated with camptothecin

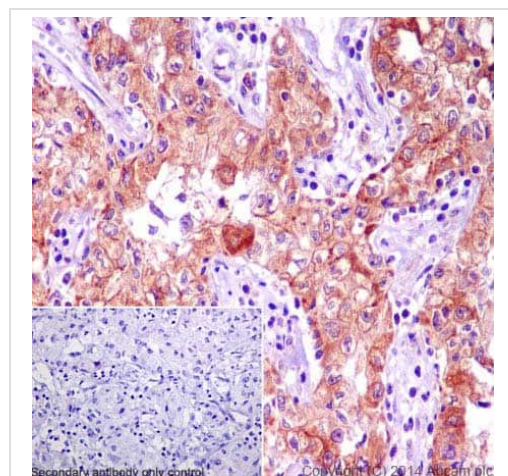
**Lane 4 :** SH-SY5Y cell lysate

**Lane 5 :** MCF-7 cell lysate treated with Cocl2

Lysates/proteins at 10 µg per lane.

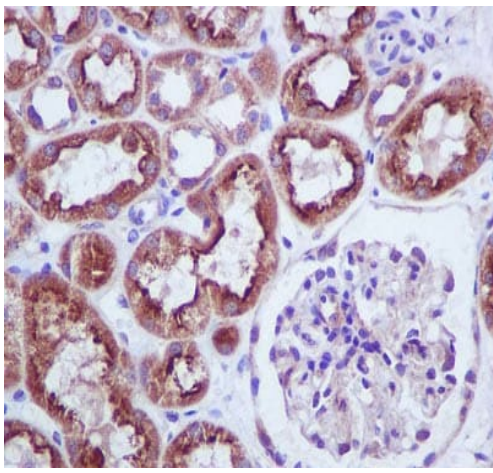
**Predicted band size:** 22 kDa

**Observed band size:** 30 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-BNIP3 antibody [EPR4034] (ab109362)

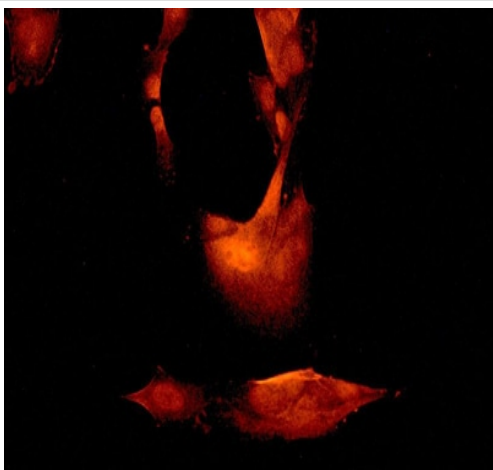
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human renal adenocarcinoma tissue labelling BNIP3 with purified ab109362 at 1/100. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. [ab97051](#), a HRP-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-BNIP3 antibody [EPR4034] (ab109362)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human kidney tissue labelling BNIP3 with unpurified ab109362 at a 1/50 dilution.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-BNIP3 antibody [EPR4034] (ab109362)

Immunocytochemistry/Immunofluorescence analysis of SH-SY5Y cells labelling BNIP3 with unpurified ab109362 at a 1/100 dilution.

### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-BNIP3 antibody [EPR4034] (ab109362)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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